Appendix E
California Department of Water Resources Recycled Water Task Force Final Report "Water Recycling 2030", Examples of Minimum Treatment Levels for Types of Recycled Water Uses

Table 1. Examples of Minimum Treatment Levels to Protect Public Health.

Types of Use	Treatment Level		
	Disinfected Tertiary	Disinfected Secondary	Undisinfected Secondary
Urban Uses and Landscape Irrigation			
Fire protection	√		
Toilet & Urinal Flushing	√		
Irrigation of Parks, Schoolyards, Residential Landscaping	√		
Irrigation of Cemeteries, Highway Landscaping		√	
Irrigation of Nurseries		√	
Landscape Impoundment	√	√*	
Agricultural Irrigation			
Pasture for milch animals		√	
Fodder and Fiber Crops			√
Orchards (no contact between fruit and recycled water)			√
Vineyards (no contact between fruit and recycled water)	√		√
Non-Food Bearing Trees			√
Food Crops Eaten After Processing		√	
Food Crops Eaten Raw	√		
Commercial/Industrial			
Cooling & Air Conditioning - w/cooling towers	√	√*	
Structural Fire Fighting	√		
Commercial Car Washes	√		
Commercial Laundries	√		
Artificial Snow Making	√		
Soil Compaction, Concrete Mixing		√	
Environmental and other Uses			
Recreational Ponds with Body Contact (Swimming)	√		
Wildlife Habitat/Wetland		√	
Aquaculture	√	√*	
Groundwater Recharge			
Seawater intrusion Barrier	√*		
Replenishment of potable aquifers	√*		

** Restrictions may apply*

Primary Wastewater Treatment *-The removal of particulate materials from domestic wastewater, usually done by allowing the solid materials to settle as a result of gravity, typically, the first major stage of treatment encountered by domestic wastewater as it enters a treatment facility. The wastewater is allowed to stand in large tanks, termed Clarifiers or Primary Settling Tanks. Primary treatment plants generally remove 25 to 35 percent of the Biological Oxygen Demand (BOD) and 45 to 65 percent of the total suspended matter. The water from which solids have been removed is then subjected to Secondary Wastewater Treatment and possibly Tertiary Wastewater Treatment.*

Secondary Wastewater Treatment *- Treatment (following Primary Wastewater Treatment) involving the biological process of reducing suspended, colloidal, and dissolved organic matter in effluent from primary treatment systems and which generally removes 80 to 95 percent of the Biochemical Oxygen Demand (BOD) and suspended matter. Secondary wastewater treatment may be accomplished by biological or chemical-physical methods. Activated sludge and trickling filters are two of the most common means of secondary treatment. It is accomplished by bringing together waste, bacteria, and oxygen in trickling filters or in the activated sludge process. Disinfection is usually the final stage of secondary treatment.*

Tertiary Wastewater Treatment – Biological, physical, and chemical treatment processes that follow Secondary Wastewater Treatment. The most common Tertiary Wastewater Treatment consists of

flocculation basins, clarifiers, filters, and disinfection processes. The term Tertiary (Wastewater) treatment is also used to include Advanced Treatment beyond filters.